

Steve Troxler Commissioner

# North Carolina Department of Agriculture and Consumer Services

April 9, 2013

Tawanda Maignan, Team Leader Emergency Response Team US EPA Office of Pesticide Programs Document Processing Desk (EMEX) Room S4900, One Potomac Yard 2777 Crystal Drive Arlington, VA 22202

Dear Ms. Maignan,

This letter notifies the EPA that I am requesting the renewal of a Specific Exemption under Section 18 of FIFRA to allow the use of the insecticide bifenthrin to control the Brown Marmorated Stink Bug (BMSB) in apple and peach orchards in North Carolina. Bifenthrin is the active ingredient in FMC Brigade WSB (Reg.# 279-3108), UPI Bifenture EC (Reg.# 70506-57), and UPI Bifenture 10DF (Reg.# 70506-227), all of which are being requested for this exemption. The two registrants, FMC and UPI fully support this request.

According to Dr. Jim Walgenbach (Professor & Extension Entomologist, NCSU) the BMSB has reached portions of North Carolina and was found on apple and peach trees in 2010, 2011, and 2012. The distribution of the BMSB population in North Carolina is expanding each year, and is now known to occur in those areas that account for the major production of apples and peaches, including Henderson, Polk, Cleveland, Lincoln, Wilkes, Alexander, Moore, Montgomery, and Anson. Dr. Walgenbach estimates about 3.5% BMSB damage to North Carolina orchards in 2012 which is lower than levels observed in other mid-Atlantic states. However, it can often be 3 to 5 years after first detection before this insect reaches populations capable of causing serious crop damage. Since this will be the forth year since BMSB was first documented in North Carolina, it remains important to for us to provide our growers with effective control options. By Dr. Walgenbach's estimates, up to 2500 of North Carolina's 6000 acres of apple trees and up to 1500 of our state's 4500 acres of peach trees may need treatments for BMSB in 2013.

North Carolina will also be participating in the renewal of last year's exemption that allowed applications of dinotefuran to control this same pest on these same crops. According to Dr. Walgenbach, bifenthrin is also needed to help provide protection during the middle of the growing season. Dinotefuran applications are limited to only two per season and due to the short preharvest interval of 3 days, are best utilized at the end of the season just prior to harvest. If applied mid-season, dinotefuran will not maintain a sufficient residual to be effective against late season BMSB populations. Due to these reasons, North Carolina is participating in the regional request to renew the bifenthrin emergency exemption for 2013.



It is our understanding that, on behalf of several states, the Maryland Department of Agriculture will submit to your office a regional section 18 package for this use. North Carolina is included as a partnering state in this request. Please refer to MDA's package for much of the information supporting this use in North Carolina. We have also enclosed some additional information specific to our state.

In order to provide apple and peach growers in the affected counties the opportunity to continue producing a profitable crop, I am requesting the renewal of this emergency exemption. Should you have any questions, feel free to contact Dr. Jim Walgenbach at (828)684-3562 (<u>Jim\_Walgenbach@ncsu.edu</u> or Lee Davis of the NCDA&CS Pesticide Section at 919-733-3556 (<u>lee.davis@ncagr.gov</u>).

Sincerely,

Steven W. Troxler

Commissioner

cc: North Carolina Pesticide Board

Dr. Richard H. Linton, Dean, College of Agriculture and Life Sciences, NCSU

Mr. Jim Saylor, President, North Carolina Apple Growers Association

Mr. Art Williams, President, North Carolina Peach Growers Society, Inc.

Dr. Jim Walgenbach, Professor and Extension Entomologist, NCSU

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#### **NC STATE UNIVERSITY**

April 2, 2013

Mountain Horticultural Crops Research and Extension Center 455 Research Dr. Mills River, NC 28759 (828) 684-3562 Jim\_Walgenbach@ncsu.edu

Mr. Lee Davis
Pesticide Registration Manager
Structural Pest Control and Pesticide Division
NCDA&CS
Raleigh, NC 27607

Dear Mr. Davis,

This letter is to express my support for the NCDA&CS participation in the renewal of the regional emergency exemption request (Section 18) for the insecticides dinotefuran and bifenthrin to control the brown marmorated stink bug (BMSB) on apples and peaches in NC. These renewal requests are regional collaborations among VA, WV, DE, MD, PA, NJ and NC, with the Virginia Department of Agriculture & Consumer Services and the Maryland Department of Agriculture taking lead roles in submitting the dinotefuran and bifenthrin requests, respectively, to the EPA.

The BMSB is an emerging pest that is increasing in numbers and expanding its distribution in NC. To date, damage to NC apples and peaches has been isolated to only a few orchards, but based on the history of this insect in mid-Atlantic states and its rapid expansion in the piedmont and mountains of NC, it is likely that a significantly larger number of orchards will be threatened in 2013. Unfortunately, the majority of insecticides registered on apples and peaches are only marginally effective against BMSB, and reliance on these products has not provided adequate control where populations are well established. Section 18 renewal requests for both bifenthrin and dinotefuran, two of the more effective products against BMSB, will provide the needed flexibility to manage this pest. Bifenthrin, with a 14-day preharvest interval, will provide control options during mid-season, while dinotefuran, with a 3-day preharvest interval, offers an option for late-season control. The availability of both products with different modes of action is also needed for resistance management programs.

Thank you for your time and effort in putting together the package of information required for North Carolina's participation in these requests.

Sincerely,

James F. Walgenbach

Professor & Extension Entomologist

### STREAMLINED REPEAT REQUEST SECTION 18 SPECIFIC EXEMPTION NORTH CAROLINA April 15, 2013

#### **USE BEING REQUESTED**

ACTIVE INGREDIENT: BIFENTHRIN

BRAND NAMES: BRIGADE WSB, BIFENTHRIN EC, &

BIFENTHRIN 10DF INSECTICIDES

EPA REG. NUMBERS: 279-3108, 70506-57, & 70506-227

SITE: APPLE, PEACH, AND NECTARINE TREES PEST: BROWN MARMORATED STINK BUG

FULL APPLICATION DATE: MAY 2012

FULL APPLICATION ID#: 12NC01 (apple), 12NC02 (peach), 12NC03 (nectarine)
YEARS REQUESTED: FIRST SPECIFIC EXEMPTION REQUEST WAS

SUBMITTED AND GRANTED IN 2012.

#### Situation:

1. The emergency condition(s) described in the previously submitted emergency exemption application continues to exist.

The situation with regard to the need for an emergency label is identical to 2012.

2. All information submitted in the previously submitted emergency exemption application is still accurate: *or* except as expressly identified in the submitted recertification application, all information submitted in the previously submitted emergency exemption application is still accurate.

Except as provided in the 2013 emergency exemption request recently submitted by the Maryland Department of Agriculture, all information submitted in the previous 2012 application is still accurate. The emergency exemption request submitted by MDA is on behalf of several partnering states including North Carolina. Please refer to that document for additional information.

3. The proposed conditions of use are identical to the conditions of use EPA approved previously (indicate ID# and date); *or* the proposed conditions of use are identical to the conditions of use EPA approved for the previous emergency exemption (indicate ID# and date) except as expressly identified (explanation attached).

The conditions of use are identical to those conditions approved by the EPA in 2012. (ID# 12NC01 (apple), 12NC02 (peach), 12NC03 (nectarine), Date: July 20, 2012)

- 4. There are no additional conditions or limitations on the eligibility for recertification identified in the previous notice of approval; *or* any conditions or limitations on the eligibility for recertification identified in the previous notice of approval of the exemption have been responded to (explanation attached).
  - Page 3 of the EPA's 2012 authorization letter identified some additional information that should be included in future exemption requests for these uses. Please refer to the 2013 exemption request recently submitted by MDA for this information.
- 5. The applicant has not newly become aware of any alternative chemical or nonchemical practice that may offer a meaningful level of pest control; *or* if any such new alternative controls are available, documentation is provided that demonstrates that each such known chemical or practice does not provide adequate control or is not economically or environmentally feasible (explanation attached).

No new alternative chemicals or nonchemical practices have been identified that will provide acceptable control of this pest.

#### **SECTION 18 FINAL REPORT 2012**

## Bifenthrin – NC Apples, Peaches, & Nectarines

FILE SYMBOL: 12NC01 (apple) 12NC02 (peach) 12NC03 (nectarine)

- 1. Total acreage, amount of commodity or other unit treated and the total quantity of the pesticide used: The target pest, brown marmorated stink bug, did not develop to the damaging levels expected in 2012. Consequently, the use of bifenthrin on apples and peaches associated with the Section 18 request was very low. Based on surveys of growers and pesticide dealers, it appears that none of the estimated 150 acres of apples and peaches treated for BMSB were sprayed with bifenthrin in 2012.
- 2. A discussion of the effectiveness of the pesticide in dealing with the emergency condition: Considering that stink bug populations were lower than expected in 2012 and that little if any bifenthrin was applied, it is not possible to quantify the effectiveness of bifenthrin in dealing with the anticipated problem. Estimates of damage in 2010 in orchards suspected of BMSB damage ranged from 10 to 15%, and damage estimates taken in 2011 averaged 3.9%, and in in 2012 about 3.5%.
- 3. A description of any unexpected adverse affects which resulted from the use of the pesticide under the exemption: None
- 4. The results of any monitoring required and/or carried out under the exemption: NA
- 5. A discussion of any enforcement actions taken in connection with the exemption: NA
- 6. Methods of disposition of a food crop, if required to be destroyed under the exemption: NA
- 7. Any other information requested by the Administrator. (This information was not requested. It is being provided to supplement the other information on this form.) Brown marmorated stink bug populations were reported in NC orchards for the first time in the fall of 2010, the same year that this insect caused unprecedented damage to apples and peaches in VA, MD, WV and PA. Based on the history of this pest it was anticipated that BMSB populations may appear damaging levels in 2012. While populations did appear in several apple and peach orchards in 2012, populations damage levels were not to levels observed in mid-Atlantic states. A lag time of 3 to 5 years between first detection and occurrence of serious damage to crops has been observed in more northern areas, and 2013 will be the fourth year since BMSB populations were first detected in NC. Bifenthrin is considered the most effective pyrethroid insecticide for BMSB control, and availability of this product in 2013 would be a valuable tool in helping to minimize damage caused by this pest.
- 8. In cases where a crisis exemption was declared, an explanation as to why there was a need to utilize the crisis provisions. NA